

REMARKS/ARGUMENTS

Claims 1-4, 6-10, 13-16, 20-32, 41, 81-85, 90-96, 100-107, 109, 119, 120, 123, 146, 147 and 152-157 remain in the application. Claims 5, 11, 12, 17-19, 33-40, 42-80, 86-89, 97-99, 108, 110-118, 121, 122, 124-145 and 148-151 have been canceled.

Claims 1-4, 6, 7, 13-16, 20-23, 25-32, 81-85, 90-94, 100-107, 109, 119, 120, 123, 146, 147, 152-155 and 157 are readable on the elected species of Fig. 1. Claims 8-10, 24, 41, 95, 96 and 156 are withdrawn.

The allowance of claim 7 subject to being rewritten in independent form including all of the limitations of the base claim and any intervening claims is noted with appreciation. Claim 7 has been amended to include all of the limitations of its base claim 1 and is now presumed allowable.

Claims 1-4, 6, 13-16, 20-23, 25-32, 81-85, 90-94, 100-107, 109, 119, 120, 123, 146 and 147 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kojima et al (U.S. Patent 5,377,084). Of these claims, claims 146 and 147 have been amended to depend from claim 7 and are submitted as allowable for substantially the same reasons. Moreover, claim 85 recites that the deformities have at least two surfaces, one of the surfaces being the reflective surfaces each having the reflective layer or covering and the other of the surfaces being the light transmissive surfaces, similar to allowed claim 7 and is submitted as allowable for substantially the same reasons.

As regards the other rejected claims 1-4, 6, 13-16, 20-23, 25-32, 81-84, 90-94, 100-107, 109, 119, 120 and 123, according to the Examiner, all of these claims are anticipated by Kojima et al because of its disclosure of a transparent substrate, film or plate 2 having opposite sides, optical deformities 7 on at least one of the sides, a

plurality of reflective surfaces 31 on the substrate each having a reflective layer or covering for reflecting light striking one of the sides, and a plurality of light transmissive surfaces 7 on or in the substrate for transmitting light striking one of the sides.

However, Kojima et al is for a backlight including a light guide 2 having two light diffusion plates 5 and 6 layered onto the outer surface thereof, not a transreflector as claimed. Moreover, the reflective surfaces 31 of Kojima et al reflect internal light striking the reflective surfaces, not exterior light incident on the exterior of one of the sides and striking the reflective surfaces as recited in amended claim 1. Further, the so-called light transmissive surfaces 7 of Kojima et al transmit interior light, not exterior light incident on the exterior of the other of the sides and striking the light transmissive surfaces as further recited in amended claim 1. Accordingly, claim 1 is submitted as clearly allowable.

Claims 2-4 and 6 depend from claim 1 and are submitted as allowable for substantially the same reasons. Moreover, claims 4 and 6 further patentably distinguish over Kojima et al, claim 4 by reciting that the substrate is a multilayer film comprised of a carrier film and an ultra-violet curable layer, and claim 6 by reciting that the reflective surfaces and transmissive surfaces vary in at least one of the following: size, shape, angle and orientation.

Regarding claim 4, it is the position of the Examiner that the limitation of “ultra-violet” curable film is product by process claim and given no patentable weight. However, as § 2173.05(g) of the MPEP makes clear, there is nothing inherently wrong with defining some part of an invention in functional terms. Moreover, in a claim that was directed to a kit of component parts capable of being assembled, the court in *In re*

Venezia, 189 USPQ 149, 151-152 (CCPA 1976) held that limitations such as “members adapted to be positioned” and “portions ... being resiliently dilatable whereby said housing may be slidably positioned” serve to precisely define present structural attributes of interrelated component parts of the claimed assembly. The same is equally true of the recitation in claim 4 of a multilayer film comprised of a carrier film and an “ultra-violet curable layer”. Since no such structural attributes of interrelated component parts of the claimed assembly are disclosed or suggested in Kojima et al, claim 4 is further submitted as allowable in its own right in addition to being dependent on claim 1.

Claim 13 is directed to a transreflector including, *inter alia*, a plurality of reflective surfaces on or in the substrate each having a reflective layer or covering for reflecting exterior light incident on the exterior of one of the sides and striking the reflective surfaces, and a plurality of light transmissive surfaces on or in the substrate for transmitting exterior light incident on the exterior of the other of the sides and striking the light transmissive surfaces, similar to claim 1 and is also submitted as clearly allowable.

Claims 14-16, 20-23 and 25-32 depend from claim 13 and are submitted as allowable for substantially the same reasons. Moreover, claims 14-16 further patentably distinguish over Kojima et al, claim 14 by reciting that the reflective surfaces are shaped, oriented or angled to reflect a greater portion of the exterior light incident on the exterior of the one side of the substrate; claim 15 by reciting that the light transmissive surfaces are shaped, oriented or angled to transmit a greater portion of the exterior light incident on the other side of the substrate; and claim 16 by reciting that the reflective surfaces are shaped, oriented or angled to reflect a greater portion of the exterior light

incident on the exterior of the one side of the substrate and the light transmissive surfaces are shaped, oriented or angled to transmit a greater portion of the exterior light incident on the exterior of the other side of the substrate.

Claims 20-23 also further patentably distinguish over Kojima et al by reciting that the reflective surfaces have a substantially larger projected surface area, when projected onto a plane parallel to the substrate or normal to the angle of maximum intensity of the exterior light incident on the exterior of the other side of the substrate, than the projected surface area of the light transmissive surfaces when projected onto a plane parallel to the substrate or than the projected surface area of the reflective surfaces when projected onto a plane normal to the angle of maximum intensity of the exterior light incident on the exterior of the other side of the substrate.

Claims 25-27 further patentably distinguish over Kojima et al, claim 25 by reciting that the light transmissive surfaces are textured or lensed to redirect the exterior light striking the light transmissive surfaces; claim 26 by reciting that the light transmissive surfaces have optical shapes on or in the light transmissive surfaces; and claim 27 by reciting that the light transmissive surfaces have an antireflection coating.

Claims 29-32 also further patentably distinguish over Kojima et al. Claim 29 recites that the reflective surfaces and the light transmissive surfaces are formed by a pattern of individual optical deformities on or in the substrate each having a length and width substantially smaller than the length and width of the substrate and having a well defined shape. Claims 30-32 recite that the reflective surfaces and the light transmissive surfaces are on or in the other side of the substrate and the one side of the substrate is shaped to redirect light. Also claims 31 and 32 recite that the one side of

the substrate has at least one of a texture, and optical deformities shaped to redirect the light transmitted by the transreflector, and claim 32 additionally recites that the one side has optical deformities which comprise at least one of prismatic grooves, lenticular grooves, cross grooves, and individual optical elements or deformities of well defined shape.

Claims 81, 84 and 90 are directed to a transreflector and backlight system comprising, *inter alia*, a backlight including a light emitting panel member having at least one panel surface for emitting light, and a transreflector having a plurality of light transmissive surfaces for transmitting light emitted by the panel surface incident on the exterior of one side of the transreflector and a plurality of reflective surfaces each having a reflective layer or covering for reflecting ambient light incident on the exterior of the other side of the transreflector, in a manner also clearly nowhere disclosed or suggested in Kojima et al. Accordingly, claims 81, 84 and 90 are submitted as clearly allowable.

Claims 82 and 83 depend from claim 81 and claims 91-94, 100-107, 109, 119, 120 and 123 depend from claim 90 and are submitted as allowable for substantially the same reasons. Moreover, claims 91-93 further patentably distinguish over Kojima et al by reciting that the reflective surfaces are shaped, oriented or angled to reflect more than 50% of the light incident on the exterior of one side of the transreflector and claims 92 and 93 by additionally reciting that the light transmissive surfaces are shaped, angled or oriented to transmit more than 50% of the light incident on the exterior of the other side of the transreflector.

Claim 94 further patentably distinguishes over Kojima et al by reciting that the panel member has a pattern of individual optical deformities for producing a particular light output distribution from the panel surface that is tuned to the side of the transreflector that receives incident light emitted by the panel surface such that the transreflector transmits a greater portion of the light emitted by the panel surface.

Claims 100-102 further patentably distinguish over Kojima et al by reciting that the reflective surfaces and the light transmissive surfaces are on or in the one side of the transreflector, and the opposite side of the transreflector has optical deformities for redirecting the light exiting from the opposite side more toward the normal relative to the opposite side of the transreflector, which optical deformities may comprise a pattern of prismatic surfaces as recited in claim 101 or a pattern of individual optical deformities each having a well defined shape as recited in claim 102.

Claims 103 and 104 further patentably distinguish over Kojima et al by reciting that the reflective surfaces and the light transmissive surfaces are in or on the one side of the transreflector, and the opposite side of the transreflector has at least one of a texture, chemical etch, laser etch, and optical deformities shaped to reflect the light transmitted by the transreflector. Also claim 104 additionally recites that the opposite side of the transreflector has the optical deformities which comprise at least one of prismatic grooves, lenticular grooves, cross grooves and individual optical deformities of well defined shape.

Claims 106 and 109 further patentably distinguish over Kojima et al by reciting that the sloping surface of at least some of the deformities of the panel member is oriented to face an optically coupled area of the input edge across the panel member.

Claim 107 further patentably distinguishes over Kojima et al by reciting that the area of the sloping surface of at least some of the deformities of the panel member varies across the panel member to attain a desired light output distribution from the panel surface.

New claims 152-154 depend from allowed claim 7 and new claim 155 depends from claim 1 and are also submitted as clearly allowable.

New claim 157 is directed to a transreflector including, *inter alia*, a plurality of light transmissive surfaces on or in the film or substrate that transmit greater than 50% of exterior light incident on the exterior of one side of the film or substrate, and a plurality of reflective surfaces on or in the film or substrate each having a reflective layer or covering that reflects more than 50% of a different exterior light incident on the exterior of the other side of the film or substrate that has a different light ray angle distribution than the light ray angle distribution of the exterior light incident on the exterior of the one side, in a manner also clearly nowhere disclosed or suggested in Kojima et al or any of the other cited references. Accordingly, claim 157 is also submitted as clearly allowable.

For the foregoing reasons, this application is now believed to be in condition for allowance of all of the pending elected claims 1-4, 6, 7, 13-16, 20-23, 25-32, 81-85, 90-94, 100-107, 109, 119, 120, 123, 146, 147, 152-155 and 157, and early action to that end is earnestly solicited. Moreover, withdrawn claims 8-10 and 156 are dependent on elected claim 1; withdrawn claims 24 and 41 are dependent on elected claim 13; and withdrawn claims 95 and 96 are dependent on elected claim 90. Accordingly, allowance of withdrawn claims 8-10, 24, 41, 95, 96 and 156 is also respectfully requested. Should

the Examiner disagree with applicants' attorney in any respect, it is respectfully requested that the Examiner telephone applicants' attorney in an effort to resolve such differences.

In the event that an extension of time is necessary, this should be considered a petition for such an extension. If required, fees are enclosed for the extension of time and/or for the presentation of new and/or amended claims. In the event any additional fees are due in connection with the filing of this amendment, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988.

Respectfully submitted,

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